

CYMOPHYLLUS FRASERIANUS (KER-GAWLER)
KARTESZ & GANDHI (CYPERACEAE), THE CORRECT
NAME FOR FRASER'S SEDGE

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ABSTRACT

The authorship of *Cymophyllus* and *Cymophyllus fraseri* is corrected to Mackenzie ex Britt. *Cymophyllus fraseri*, hitherto referring to Fraser's sedge, is considered to be a taxonomic synonym of the following new combination: *Cymophyllus fraserianus* (Ker-Gawler) Kartesz & Gandhi.

Key Words: Fraser's sedge, *Carex fraseri*, *Carex fraseriana*, *Cymophyllus fraseri*, *Cymophyllus fraserianus*, southeastern United States

INTRODUCTION

Fraser's sedge, known hitherto either as *Carex fraseri* Andrews (Strausbaugh and Core, 1970) or more commonly as *Cymophyllus fraseri* (Andrews) Mackenzie (Britton and Brown, 1913; Small, 1933; Fernald, 1950; Clarkson, 1961; Massey, 1961; Gleason, 1963; Radford et al., 1968; Wofford, 1978, 1989; Rayner, 1979; Wiegman, 1979; Kartesz and Kartesz, 1980; Massey et al., 1983; Brown and Brown, 1984; Harvill et al., 1986; Jones and Coile, 1988; Branson et al., unpubl. ms., Endangered, threatened, and rare plants of KY) ranges from northeastern GA and adjacent SC, western NC, eastern TN, southwestern VA, through WV and extends northward to MD and southern PA (Kartesz, unpubl. ms., Distributional atlas for the North American flora). The names *Cymophyllus* (a monotypic genus) and *Cymophyllus fraseri* were originally proposed in Britton and Brown (1913). For *Cymophyllus fraseri*, the basionym (*Carex fraseri* Andrews) and the synonym (*Carex fraseriana* Ker-Gawler) were cited.

Britton and Brown's (1913) work included contributions from several authors, e.g., Gramineae by G. V. Nash (footnote, p. 107), *Carex* by K. K. Mackenzie (footnote, p. 352), etc. The text, excluding the contributions, was written by Britton (cf. title page). Hence, unless otherwise shown, all new names must be attributed to Britton. Although the names *Cymophyllus* and *Cymophyllus fraseri* were attributed to Mackenzie, there was no indication given that the *Cymophyllus* text was published for Mackenzie by Britton and Brown. Hence, the correct authorship for the genus

name should be: Mackenzie *ex* Britt. Farr et al. (1979) cited the authorship as: Mackenzie *ex* Britton & Brown. As indicated above, the authorship of the name *Cymophyllus* should be credited to Britton alone, not to Britton and Brown.

As to the correct name for Fraser's sedge, both names, *Carex fraseri* Andrews and *Carex fraseriana* Ker-Gawler were published in 1811. Mackenzie (1931, p. 8) cited June 1811 as the date of Andrews' publication (Bot. Repos. 10(132): t. 639) and July 1811 for Ker-Gawler's publication (Bot. Mag. 34: t. 1391). We concur with Mackenzie regarding Ker-Gawler's date of publication, which, as reflected by the engraver's date, was found at the bottom of the plate. Stafleu and Cowan (1976, p. 578) stated that the engraver's date was generally accepted as the date of the publication of new taxa in Curtis' Botanical Magazine.

With reference to the date of Andrews' publication, no engraver's date was given on the plate 639; however, Britten (1916) and Stafleu and Cowan (1976) differed with Mackenzie's information. Stafleu and Cowan mentioned that the Botanist's Repository vol. 10(132), t. 639 was issued in November 1811. Britten provided additional information on Andrews' plates, stating that he ascertained Andrews' dates from the "Monthly Botanical Reports" in the Monthly Magazine for 1807–1813. According to Britten, the records showed that the Monthly Magazine reported vol. 10, parts 128–131 (plates 618–636) in June 1811 and reported vol. 10, part 132 (plates 637–640) in November 1811. Britten remarked that the date of the Magazine (November 1811, in this case) was at least one month later than the appearance of the plate in Botanist's Repository. (Furthermore, we noticed that in the specimen collection data for t. 638, Andrews mentioned that he received information from J. Milne in April 1811.) It is most likely that Botanist's Repository, vol. 10(132), t. 639 was issued in September–October 1811, and we consider Mackenzie's as well as Stafleu and Cowan's bibliographical information on the date of Andrews' publication to be an error.

Ker-Gawler (1811) gave a description of *Carex fraseriana* along with a reference to *Carex fraseri*, and mentioned the plate no. as 638, not 639. In his discussion, Ker-Gawler stated that the species was named for Mr. Fraser, who collected the species from North Carolina and introduced it into England. The preceding information is almost identical with that provided by Andrews. It is possible that Ker-Gawler had access to Andrews' manuscript and

copied the data from Andrew's specimen. It is further possible that either Ker-Gawler assumed the plate number to be 638 or Andrews altered the plate number after Ker-Gawler studied it. In any event, we consider Ker-Gawler's reference to Andrews' *t.* 638 as a bibliographical error for *t.* 639 (Greuter, 1988; ICBN, Art. 33.2). The *t.* 638 refers to an Australian legume, *Daviesia latifolia* R. Br. *ex* Ait. The reason for Ker-Gawler altering the specific epithet from the original "*fraseri*" (a noun with genitive ending) to "*fraseriana*" (an adjectival form) is uncertain. Dr. A. A. Reznicek (MICH; pers. comm.) remarked that the epithet "*fraseriana*" agrees in gender with the feminine gender of the genus *Carex*.

Although both epithets, *fraseri* ("of Fraser" or "Fraser's") and *fraseriana* ("the Fraserian" or "for Fraser"), denote essentially the same thing, the former epithet must not be considered to be an orthographic variant of the latter. We consider these two epithets to be different, and since the names *Carex fraseri* and *Carex fraseriana* were based on two separate types, we believe that the name *Carex fraseri* must be treated as a taxonomic synonym of *Carex fraseriana*. The binomial *Carex fraseriana* is the earliest applicable name and accordingly we propose the following new combination.

TAXONOMY

Cymophyllus fraserianus (Ker-Gawler) Kartesz & Gandhi, *comb. nov.* *Carex fraseriana* Ker-Gawler, Bot. Mag. 34: *t.* 1391. Jul. 1811. HOLOTYPE: Bot. Mag. 34: *t.* 1391. Jul. 1811.

Carex fraseri Andrews, Bot. Rep. 10(132): *t.* 639. Sep.–Oct. 1811. *Cymophyllus fraseri* (Andrews) Mackenzie *ex* Britt. in Britton & Brown, Ill. Fl. N. U.S., ed. 2. 1: 441. 1913. HOLOTYPE: Bot. Rep. 10(132): *t.* 639. Sept.–Oct. 1811.

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LITERATURE CITED

ANDREWS, H. Sept.–Oct. 1811. Bot. Repos., vol. 10(132). Printed by T. Bensley for the author, London.

- BRITTEN, J. 1916. Andrews's "Botanists' Repository." *J. Bot.* 54: 236–246.
- BRITTON, N. L. AND A. BROWN. 1913. *An Illustrated Flora of the Northern United States, Canada and the British Possessions*, ed. 2, vol. 1. Charles Scribner's Sons, New York.
- BROWN, M. L. AND R. G. BROWN. 1984. *Herbaceous Plants of Maryland*. The Book Center, University of Maryland, College Park, MD.
- CLARKSON, R. B. 1961. Fraser's sedge, *Cymophyllus fraseri* (Andrews) Mackenzie. *Castanea* 26: 129–136.
- FARR, E. R., J. A. LEUSSINK AND F. A. STAFLEU, EDs. 1979. *Index Nominum Genericorum*, vol. I: Aa-Epochnium. *Regnum Veg.* 100.
- FERNALD, M. L. 1950. *Gray's Manual of Botany*, 8th ed. American Book Company, New York.
- GLEASON, H. A. 1963. *The New Britton and Brown Illustrated Flora of Northeastern United States and Adjacent Canada*, Vol. 1. Hafner Publishing Company, Inc., New York.
- GREUTER, W. (Chairman, Editorial Committee). 1988. *International Code of Botanical Nomenclature*. *Regnum Veg.* 118.
- HARVILL, A. M., JR., C. E. STEVENS AND D. M. E. WARE. 1986. *Atlas of the Virginia Flora*, ed. 2. Virginia Botanical Associates, Farmville, VA 23901.
- JONES, S. B., JR. AND N. C. COILE. 1988. *The Distribution of the Vascular Flora of Georgia*. Department of Botany, University of Georgia, Athens, GA.
- KARTESZ, J. T. AND R. KARTESZ. 1980. *A Synonymized Checklist of the Vascular Flora of the United States, Canada, and Greenland*, Vol. 2. The University of North Carolina Press, Chapel Hill, NC.
- KER-GAWLER, J. B. Jul. 1811. *Carex fraseriana*. Fraser's carex. *Bot. Mag.* 34: 1391.
- MACKENZIE, K. K. 1931. (Poales) Cyperaceae—Cariceae. *North American Flora*, Vol. 18(1). New York Botanical Garden, NY.
- MASSEY, A. B. 1961. *Virginia Flora, an Annotated Catalog of Plant Taxa Recorded as Occurring in Virginia*. *Virginia Agric. Exp. Sta. Techn. Bull.* 155.
- MASSEY, J. R., D. K. S. OTTE, T. A. ATKINSON AND R. D. WHETSTONE. 1983. *An Atlas and Illustrated Guide to the Threatened and Endangered Vascular Plants of the Mountains of North Carolina and Virginia*. *Southe. Forest Exp. Sta. Gen. Techn. Rep.* SE-20. Ashville, NC.
- RADFORD, A. E., H. E. AHLES AND C. R. BELL. 1968. *Manual of the Vascular Flora of the Carolinas*. The University of North Carolina Press, Chapel Hill, NC.
- RAYNER, D. A. (Chairman, The South Carolina Advisory Committee on Endangered, Threatened, and Rare Plants). 1979. *Native vascular plants*. South Carolina Museum Commission, *Museum Bull.* No. 4.
- SMALL, J. K. 1933. *Manual of the Southeastern Flora*. New York. (publ. by Small).
- STAFLEU, F. A. AND R. S. COWAN. 1976. *Taxonomic Literature*, ed. 2. Vol. 1: A–G. *Regnum Veg.* Vol. 94.
- STRAUSBAUGH, P. D. AND E. L. CORE. 1970. *Flora of West Virginia*, part I, ed. 2. *West Virginia University Bull. Ser.* 70(7–2).
- WIEGMAN, P. G. 1979. *Pennsylvania Endangered Plant Survey*. Western Pennsylvania Conservancy, Pittsburgh, PA.

- WOFFORD, B. E. (Rapporteur, Committee for Rare Plants). 1978. The rare vascular plants of Tennessee. *J. Tennessee Acad. Sci.* 53: 128–133.
- . 1989. *Guide to the Vascular Plants of the Blue Ridge*. The University of Georgia Press, Athens, GA.

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